District/Zone/Centre Code   Serial No. (Roll No.)

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NATIONAL MEANS-CUM-MERIT SCHOLARSHIP EXAMINATION, 2020

(For Class VIII Studying Students)
Conducted by :
The Department of Education (S)
Government of Manipur

SCHOLASTIC APTITUDE TEST/VIII/NMMSE/20

Time : 90 Minutes   **Max. Marks : 100**

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you answer the questions.
Answers are to be given on Separate Answer Sheet

1. Please write your Centre Code and Serial No. (Roll No.) very clearly on your answer sheet. Use one digit in one block.

2. There are 100 questions in the test.

3. Rough work can be done anywhere in the booklet.

4. All questions are compulsory.

5. There is no NEGATIVE marking. Every correct answer will be awarded 1 (one) mark.

6. All questions are Multiple Choice. Each item has 4 (FOUR) alternatives, out of which only one will be the correct answer.

7. Cross ⊠only one of the alternative numbers which you think is the correct answer to an item.

    Example : ☐1 ⊠ ☐3 ☐4

8. To change the first answer, put a parallel line to the first alternative number then mark the second alternative answer as per instruction at 7.

    Example :   ☐1 ⊠ ☐3 ⊠

9. Please follow the instructions given on the answer sheet.

Q1.   A bus is moving with a uniform velocity of 72 km/hr. The velocity of the bus in m/s is
1.   5 m/s
2.   10 m/s
3.   15 m/s
4.   20 m/s

Q2.   Force has
1.   Magnitude only
2.   Direction only
3.   Both magnitude and direction
4.   Neither magnitude nor direction.

Q3.   The forces that cause a vehicle to slow down when the brakes are applied are a combination of
1.   Static friction and sliding friction
2.   Sliding friction and rolling friction
3.   Static friction and rolling friction
4.   Static friction, sliding friction and rolling friction.

Q4.   Pressure is equal to
1.   Force/Area
2.   Force x area
3.   Force/length
4.   Force x length

Q5.   Equal amounts of force F are applied to four different areas. In which area the pressure is more.
1.   100 cm x 10 cm
2.   10 cm x 15 cm
3.   10 cm x 20 cm
4.   15 cm x 15 cm

Q.6.   If a particle of air undergoes 1000 longitudinal vibrations in 5 seconds, then the frequency of the air would be
1.   500 Hz.
2.   300 Hz
3.   200 Hz
4.   100 Hz

Q.7.   The frequency range used for medical ultrasound is from
1.   1 KHz to 20 KHz
2.   1 MHz to 20 MHz
3.   1 Hz to 20 Hz
4.   20 Hz to 20 KHz.

Q.8. There are two wires attached in Light Emitting Diode (LED) of unequal lengths. while connecting to the circuit using battery, we should connect
1. longer lead to negative and shorter lead to positive
2. longer lead to positive and shorter lead to negative
3. both longer and shorter to positive
4. both longer and shorter to negative.

Q.9. The speed of sound in air is about
1. 140 m/s
2. 240 m/s
3. 340 m/s
4. 440 m/s

Q.10. Image formed by a plane mirror is
1. virtual, behind the mirror and enlarged.
2. virtual, behind the mirror and of the same size as the object.
3. real at the surface of the mirror and enlarged.
4. real, behind the mirror and of the same size as the object.

Q.11. What is the angle of incidence of a ray if the reflected ray is as an angle of 90^0 to the incident ray?
1. 0^0
2. 30^0
3. 45^0
4. 60^0

Q.12. Laws of reflection of light says that
1. Angle of incidence is greater than angle of reflection.
2. Angle of incidence is less than angle of reflection.
3. Angle of incidence is equal to the angle of reflection.
4. Angle of incidence is doubled the angle of reflection.

Q13. Which of the following is a good conductor of electricity?
1. Copper
2. Book
3. Plastic scale
4. Wooden board

Q14. The only naturally occuring long mineral fibre is
1. Asbestos
2. Cotton
3. Silk
4. Wool

Q15. 4R principle means
1. Recycle Recover Reuse Reduce
2. Recover Reduce Reuse Recycle
3. Reuse Recycle Recover Reduce
4. Reduce Reuse Recycle Recover

Q16. Which of the following is a thermosetting plastic ?
   1. Bakelite
   2. PET
   3. Polythene
   4. PVC

Q17. The first fully synthethic fibre is
   1. Acrylic
   2. Nylon
   3. Polyster
   4. Rayon

Q. 18. A metal which is liquid in room temperature is
   1. Copper
   2. Gold
   3. mercury
   4. silver

Q.19. The most common metal used for making electrical wire is
   1. Copper
   2. Iron
   3. Gold
   4. Silver

Q.20. If a piece of litmus paper is dipped in sulphurous acid
   1. It changes from red colour to blue
   2. It changes from blue colour to red
   3. No change in colour
   4. None of the above

Q.21. Most of the fuels like petrol, LPG, natural gas etc are compounds of
   1. Carbon and Nitrogen
   2. Hydrogen and Oxygen
   3. Hydrogen and Carbon
   4. Nirtogen and Oxygen

Q.22. The most common fire extinguisher is
   1. Carbon dioxide
   2. Foam
   3. Soda ash
   4. Water

Q.23. Which of the following substances is least combustible?
   1. Alcohol
   2. charcoal
   3. Kerosene
   4. Paper

Q.24. Coal tar is a mixture of about
1. 100 carbon compounds
2. 150 carbon compounds
3. 200 carbon compounds
4. 250 carbon compounds

Q.25. Bhopal Gas Tragedy was occured on
1. The night of December 1-2, 1984
2. The night of December 2-3, 1984
3. The night of December 1-2, 1994
4. The night of December 2-3, 1994

Q.26. Ozonisation of water kills germs and
1. Decreases the dissolved carbon-dioxide
2. Increases the dissolved carbon dioxide
3. Decreases the dissolved oxygen
4. Increases the dissolved oxygen

Q.27. Which of the following animals is a milch cattle ?
1. Dog
2. Bee
3. Goat
4. Crow

Q.28. Pisciculture is the practice of
1. Rearing of fishes
2. Rearing of bees
3. Rearing of pigs
4. Rearing of birds

Q.29. Malaria is caused by
1. Algae
2. Fungi
3. Bacteria
4. Protozoa

Q.30. The process of heating of milk to get free from microorganisms is called
1. Packing
2. Pasteurisation
3. Freezing
4. Vaccination

Q.31. When was "the Keibul Lamjao National Park" declared as a "National Park".
1. 1977
2. 1972
3. 1974
4. 1975

Q.32. "Red Data List" is maintained by
1. IUCN
2. WWF
3. IBWL
4. UNEP

Q.33. Siberian cranes like Ducks undertake
1. Seasonal migration.
2. Daily migration
3. Cyclic migration
4. Latitudinal migration

Q.34. The unique movement exhibited by white blood cells (WBCs) is known as
1. Circular movement
2. Longitudinal movement
3. Vertical movement
4. Amoeboid movement

Q.35. The smallest cell is
1. Bacteria
2. WBC
3. Mycoplasma
4. Liver cell

Q.36. Chloroplasts are absent in
1. Leaves
2. Stem
3. Bud
4. Root

Q.37. The single cell formed by the fusion of an ovum with a sperm is
1. Zygote
2. Gamete
3. Ovary
4. Embryo

Q.38. The change of Pupa to adult silkworm is referred as
1. Fertilization
2. Metamorphosis
3. Veviparous
4. Budding

Q.39. Carbonisation means
1. Formation of coal
2. Formation of fossils
3. Conservation of fossil fuels
4. Decomposition of petroleum gas

Q.40. The volatile liquid that can detect the leakage of LPG from a domestic gas cylinder is
1. Ethyl Mercaptan
2. CNG
3. Methane
4. Petrol

Q.41. If $a = \dfrac{1}{3-2\sqrt{2}}$, $b = \dfrac{1}{3+2\sqrt{2}}$ then the value of

$a^2 + b^2$ is
1. 34
2. 35
3. 36
4. 37

Q.42. If $3^{x-y} = 27$ and $3^{x+y} = 243$ then x is equal to
1. 0
2. 4
3. 2
4. 6

Q.43. If x persons can complete a work in t hours, in how many hours y persons can complete ?
1. $\dfrac{xy}{t}$ hours
2. $\dfrac{yt}{x}$ hours
3. $\dfrac{tr}{y}$ hours
4. $\dfrac{tx}{y}$ hours

Q.44. In a cage, there are rabbits and parrots and no. of heads are 28 and feet are 72. Find the number of parrots and rabbits
1. 20, 8
2. 12, 16
3. 14, 14
4. 16, 12

Q.45. One third of a number is greater than one fourth of its successor by 1. The number is
1. 20
2. 5
3. 25
4. 15

Q.46. If P = Rs. 10000, R = 6%, which of the following is not correct
1.   Interest = Rs. 1800 if T = 3 years
2.   Interest = Rs. 300 if T = 6 months
3.   Interest = Rs. 2400 if T = 18 months
4.   Interest = Rs. 3000 if T = 5 years

Q.47. A four digit number 21y5 is a multuple of 9, where y is a digit, the value of y is
1.   -1
2.   1
3.   10
4.   -10

Q.48. The area of a rhombus is 240 cm² and one of the diagonals is 16 cm, the other diagonal is
1.   60 cm
2.   30 cm
3.   45 cm
4.   15 cm

Q.49. Which of the following solids is polyhedron
1.   Sphere
2.   Cylinder
3.   Cone
4.   Cube

Q.50. Mani bought a T.V set for Rs. 12600 which included GST of 20%. What is the price of the T.V set before GST was added ?
1.   Rs. 10000
2.   Rs. 11000
3.   Rs. 10500
4.   Rs. 12580

Q.51. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then number of matches they played in all is
1.   35
2.   30
3.   20
4.   25

Q.52. Rani makes a cuboid of clay of sides 5 cm, 2 cm, 5 cm. How many such cuboids will she need to form a cube ?
1.   15
2.   20
3.   10
4.   4

Q.53. The sum of $\sqrt{17.64}$ and $\sqrt{12.25}$ is
  1. 8
  2. 7.5
  3. 7.7
  4. 7

Q.54. If one of the numbers of a Pythagorean Triplet is 12, the other two numbers are
  1. 35,36
  2. 35,37
  3. 35,34
  4. 35,35

Q.55. An unbiased dice is thrown once. The probability of occuring a prime number is
  1. 1/2
  2. 1/3
  3. 1
  4. 0

Q.56. Which of the following statement is incorrect ?
  1. All rectangles are squares
  2. All squares are rectangles
  3. All rhombus are parallellograms
  4. Diagonals of rectangles are equal in length

Q.57. Tomba's age is three times his son's age. Ten years ago he was five times his son's age. Tomba's Present age is
  1. 20
  2. 40
  3. 60
  4. 80

Q.58. What is the height of the cuboid whose base area is 180 cm^2 and volume is 900 cm^3
  1. 5 cm
  2. 4 cm
  3. 5.5 cm
  4. 3.5 cm

Q.59. If each edge of a cube is doubled, how many times will its volume increase ?
  1. 4 times
  2. 2 times
  3. 3 times
  4. 8 times

Q.60. The value of $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$ is
1. 1/2
2. -1/2
3. 3/4
4. 1

Q.61. The direct sea route to India was discovered by
1. The English
2. The French
3. The Dutch
4. The Portuguese

Q.62. The seven years' Devastation of Manipur occured from
1. 1812-1819
2. 1819-1826
3. 1826-1833
4. 1833-1840

Q.63. Foreign capitalists were attracted to Indian Industry in the colonial period, why ?
1. High profits
2. Labour was cheap
3. Availability of raw materials
4. All of the above.

Q.64. Which of the following is the ODD one ?
1. Rani Lakshmi Bai - Jhansi
2. Kunwar Singh   - Bihar
3. Bahadur Shah   - Lucknow
4. Nana Sahib   - Kanpur.

Q.65. Why did Mahatma Gandhi started Basic Education or the Nai Talim ?
1. To promote nationalism
2. To promote free compulsory education
3. To promote craft-centred
4. All of the above.

Q.66. Why is Raja Ram Mohan Roy regarded as the first great leader of modern India ?
1. He was a great freedom fighter.
2. He was a stout champion of Womens' Rights.
3. He abolished untouchability
4. All of the above.

Q.67. Which one of the following is not associated with "English literature"?
   1. Prem Chand
   2. Sorojini Naidu
   3. Mulk Raj Anand
   4. Sri Aurobindo

Q.68. Who has given the title "Rani" to Gaidinliu?
   1. The Govenment of Manipur
   2. The Govenment of India
   3. Jawaharlal Nehru
   4. Jadonang

Q.69. Following are some of the events of India National Movement. Arrange them in chronological order.
   A. Swadeshi
   B. Surat Split
   C. Lucknow Session
   D. Jallianwala Bagh Massacre

   1. A B C D
   2. B C D A
   3. C D A B
   4. D A B C

Q.70. Under whose chairmanship the consitution of India was drafted.
   1. Mahatama Gandhi
   2. Jawaharlal Nehru
   3. Dr. B.R. Ambedkar
   4. C. Gopalchari

Q.71. Which of these is an example of sustainable development?
   1. Ignoring the lights when they are switched on but not required.
   2. Not wasting paper.
   3. Using coal and petroleum deposits at a fast pace.
   4. None of these.

Q.72. The types of resources on the basis of stock are
   1. Ubiquitous resources
   2. Actual resources
   3. Renewable and non-renewable
   4. Abiotic and biotic resources

Q.73. Crude petroleum is obtained from
   1. Igneous rocks
   2. Sedimentary rocks
   3. Volcanic rocks
   4. Metamorphic rocks

Q.74. Which one of the following resources is not used in Manipur?
   1. Wind energy
   2. Tidal energy
   3. Water power
   4. Solar energy

Q.75. Which is not the agro-based industry?
1. Textile
2. Oil
3. Sugar
4. Food processing

Q.76. The main characteristic of shifting cultivation practice in Manipur is
1. Growing of single crop
2. Use of modern implements
3. Surplus product for sale
4. Clearance of forest land

Q.77. The city which employs the highest number of software professionals in IT industry is
1. Mumbai
2. Delhi
3. Chandigarh
4. Bangalore

Q.78. The candle manufacturing industries of Manipur belong to
1. Public sector industries
2. Private sector industries
3. Joint sector industries
4. Co-Operative sector industries

Q.79. When was Human Resource Development Ministry formed in India at Central level of Government?
1. In 1990
2. In 1985
3. In 2004
4. In 2009

Q.80. The sex ratio of Manipur is 933.What does it indicate?
1. More females than males
2. More males than females
3. Equal number of males and females
4. High number in working age

Q.81. Human resources are also called...
1. Man-power.
2. Skills of the people.
3. Physical materials.
4. Industrial goods.

Q.82. Electric bulb is ...
1. An intermediate good.
2. A consumer good.
3. Not an economic good.
4. Public good.

Q.83. Which of the following is the meaning of "Minimum Wages"?
1. The wages received by every workers.
2. A high wage paid to the workers.
3. Small amount of wages paid to the workers.
4. The amount of wages below which no workers can be paid.

Q.84. In which of the following year, the disaster brought by Union Carbide Bhopal brought the issue of environment to public notice?
1. 1984.
2. 1995.
3. 1992.
4. 1980.

Q.85. Development with minimium damage to renewable resource and conserving natural environmental system is called
1. Stagnant growth.
2. Economic growth / development.
3. Sustainable development.
4. Infrastructural development

Q.86. Industries owned and operated by government and its agencies are called
1. Private sector industries
2. Co-operative sector industries
3. Joint sector industries
4. Public sector industries.

Q.87. Decline of Handicrafts in India in the 19th century was due to the
1. Rapid development of industry in India.
2. One way free-trade on India imposed by the British.
3. The people of India were forced to produce non-handicraft products.
4. None of the above.

Q.88. Farmer in Manipur remain poor because
1. his field is not properly connnected with mortable land.
2. banking facility is not available for him.
3. sold all his produces at a lower prices.
4. All the above.

Q.89. Foreign companies set up their plants in India because of the
1. Availability of cheap labour.
2. Most Indian labours have more skill.
3. Indians are more educated.
4. Foreign labours have no skills.

Q.90. Human wants are met by using and transforming the gift of
1. Nature
2. Government
3. Friends
4. Relatives

Q.91. Universal Adult suffrage refers to
1. Right to vote to all the male citizens.
2. Right to vote to all the adult citizens.
3. Right to vote to all the high caste and class citizens
4. Right to vote to only the educated citizens

Q.92. Money bill originate only from the Lok sabha because
1. It has more members than Rajya sabha
2. It is the lower house of Parliament.
3. It controls over the executives. The council of Ministers is responsible only to the Lok sadha.
4. It is the house of people and so the purse of the nation must be under its control.

Q.93. Who sets the minimum wages for the workers ?
1. Home Minister.
2. Finance Minister.
3. Labour Minister.
4. Prime Minister.

Q.94. Read the following statements of India, being a secular state.
A. There is equal treatment of all religions.
B. Citizens are given the right of not to follow any religion.
C. There is existence of state religion.
D. Intervention of the state in religion as to remove evils in it is not allowed.
Choose the correct statements :
1. A and D
2. A and B
3. B and D
4. B and C

Q.95. Instances of arrests for criticising government, uploading jokes or memes deemed to be allegedly objectionable at social media is a resonable restriction on :
1. Right against exploitation.
2. Right to freedom.
3. Right to equality.
4. Cultural and educational rights.

Q.96. What is the full form of FIR?
1. First Investigation Report
2. First Inquiry Report
3. First Informative Report
4. First Information Report

Q.97. To ensure Independence of Judiciary, the Constitution of India provides
1. Seperation of judiciary from executive and legislature.
2. Sound method of appointment of judges by the President.
3. Difficult process of removing the judges once appointed.
4. All the above.

Q.98. Which of the following is not correct about the Mandal Commission?
1. Reservation should be applied to promotional posts.
2. 27% job reservation for OBC's.
3. Reservation is confined to the pre entry into a service.
4. Parliament approved this reservation policy in 1993.

Q.99. Antyodaya Anna Yojana (AAY) scheme of the poor is related to providing
1. Higher education
2. Housing
3. Highly subsidised food grains
4. Health care facilities

Q.100. Vote -On - Account is related to
1. Contingency Fund
2. Consolidated Fund
3. Public Account Fund
4. None of the above